ABSTRACT

5

10

15

TERMINATION STRUCTURES FOR SEMICONDUCTOR DEVICES AND THE MANUFACTURE THEREOF

A semiconductor device has a semiconductor body (22) comprising an active area (7) and a termination structure (16) surrounding the active area. The termination structure comprises a plurality of lateral transistor devices (2a to 2d) connected in series and extending from the active area towards a peripheral edge (42) of the semiconductor body, with a zener diode (8) connected to the gate electrode (4) of one of the lateral devices for controlling its gate voltage, such that a voltage difference between the active area and the peripheral edge is distributed across the lateral devices and the zener diode. The termination structure (16) is capable of withstanding higher voltages in a compact manner and features thereof are susceptible to fabrication in the same process steps as features of the active area (7).